

WHAT IS CLAIMED IS:

1. An isolated mutant cell comprising decreased levels of sialic acid containing host cell receptors for influenza virus relative to a corresponding wild-type cell which supports efficient influenza virus replication.

2. The isolated mutant cell of claim 1 which is a mammalian cell.

3. The isolated mutant cell of claim 2 which is a swine, bovine, simian or canine cell.

Madin-Darby canine kidney cell

4. The isolated mutant cell of claim 1 wherein the wild-type cell is a MDCK → ex: cell.

*MDCK-Sm10
MDCK-Ma*

5. The isolated mutant cell of claim 2 which is a mink cell.

6. The isolated mutant cell of claim 5 which is a mink lung cell.

7. The isolated mutant cell of claim 1 which is an avian cell.

8. The isolated mutant cell of claim 1 which has decreased levels of *N*-acetylneuraminic acid. → *NeuNAc*

9. The isolated mutant cell of claim 1 which has decreased levels of *N*-glycolylneuraminic acid.

10. The isolated mutant cell of claim 1 which has decreased levels of *N*-acetylneuraminic acid and *N*-glycolylneuraminic acid. → *NeuGe*